

# NATIONAL INTEGRATED DROUGHT INFORMATION SYSTEM MISSOURI RIVER BASIN DROUGHT EARLY WARNING SYSTEM

TRIBAL ENGAGEMENT WORKSHOP, RAPID CITY, SEPT. 17-18, 2014



Participants from 18 tribes, academic institutions and federal and state agencies gathered at the Journey Museum and Learning Center in Rapid City for the two-day Missouri River Basin Tribes Workshop on Extreme Events and Drought Resiliency.

## Tribes share observations, concerns, needs to develop drought resilience

Tribes in the Plains live in some of the most highly variable climatic locations in the U.S. The Missouri River Basin is known for extreme weather and climate variability, as evidenced by the stark contrast between flooding in 2011, followed by drought in 2012. Drought is a normal part of climate throughout the Basin, causing devastating impacts during the 1930s Dust Bowl, the 1950s, 1988-89, 2000-06, and 2012-13.

Extreme events, such as drought, flooding, and other climate and weather phenomena, will profoundly exacerbate growing demand on finite tribal resources. These extremes create new challenges and opportunities for problem-solving in Indian Country to ensure tribal sustainability and resiliency into the 21st Century.

In September 2014 tribal representatives, scientists, academicians and members of both state and federal governments gathered in Rapid City, S.D., to discuss drought and climate change, drought impacts, early warning systems, and planning for extreme events.

The meeting, sponsored by the National Integrated Drought Information System (NIDIS), focused on engagement with the tribes in the Missouri River Basin. Sixteen of twenty-eight tribes from the Basin were represented, as well as two tribes from Oklahoma with Missouri Basin roots.

A goal of the workshop was for NIDIS and its partners to share information about the history and culture of the tribes which reside within the Missouri River drainage, specifically about local weather and

### PARTICIPATING TRIBES

- Standing Rock Sioux Tribe
- Sisseton Wahpeton Sioux Tribe
- Flandreau Santee Sioux Tribe
- Crow Creek Sioux Tribe
- Lower Brule Sioux Tribe
- Rosebud Sioux Tribe
- Oglala Sioux Tribe
- Ponca Tribe of Nebraska
- Santee Sioux Tribe
- Iowa Tribe of Kansas and Nebraska
- Sac and Fox Nation of Missouri in Kansas and Nebraska
- Crow Tribe
- Gros Ventre & Assiniboine of Ft. Belknap
- Eastern Shoshone and Northern Arapaho Tribes of Wind River
- Kickapoo Tribe in Kansas
- Cheyenne River Sioux Tribe
- Cheyenne & Arapaho
- Iowa Tribe of Oklahoma

### OTHER PARTICIPANTS

- US Army Corps of Engineers
- Kiksapa Consulting, LLC
- Montana Department of Natural Resources and Conservation
- NOAA National Weather Service
- Louis Berger
- Syntropy Energy / RE-AMP
- United States Department of Agriculture – Agricultural Research Service
- Little Big Horn College
- South Dakota State University Extension
- United States Department of Agriculture – Natural Resources Conservation Service – Central Technology Center
- United States Department of Agriculture – Forest Service
- National Oceanic and Atmospheric Administration
- National Drought Mitigation Center, University of Nebraska – Lincoln
- American Indian Higher Education Consortium
- NOAA Climate Program Office
- Bureau of Indian Affairs
- North Central Climate Science Center, Colorado State University
- National Aeronautics and Space Administration
- Federal Emergency Management Agency – Mitigation Division
- High Plains Regional Climate Center
- Wolf Mountain Environmental
- South Dakota State University / South Dakota State Climate Office





climate phenomena impacts to tribes and their resources. The workshop built on NIDIS' previous and current work in the Basin, in order to strengthen lasting relationships with the tribes. The underlying goal of the ongoing activities is to increase drought planning and resilience.

At the workshop tribal representatives shared the conditions, needs and efforts within their lands to prepare for climate extremes and drought. Key drought partners from various sectors delivered information on identifying resources and opportunities to work together on drought and climate resilience and planning in the basin.

NIDIS, NDMC, NOAA Regional Collaboration, NCDC, tribal individuals, American Association of State Climatologists and the HPRCC organized the meeting.

### Next steps

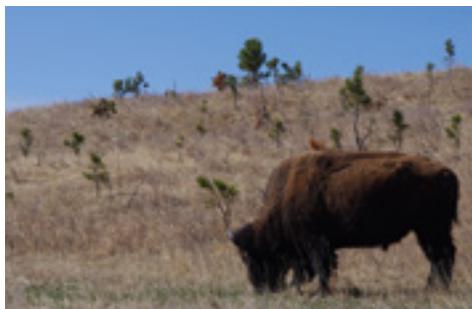
The group identified the following outcomes:

- Exploring opportunities to expand and strengthen monitoring capabilities throughout tribal lands
- Investigating partnerships with tribal colleges to build capacity for climate and drought planning efforts with their specific tribe
- Continuing outreach to the tribes in

the basin through several mechanisms, including direct outreach to tribal councils.

- Expanding funding potential with other federal agencies and programs.

A more detailed report specifying outcomes and next steps will be forthcoming. The meeting opened the door to continuing engagement opportunities among these sovereign nations, NOAA, NIDIS and NCDC.



### SEE PRESENTATIONS FROM THE WORKSHOP

Posted at <http://drought.gov/drought/news/tribal-engagement-workshop-extreme-events-and-drought-resiliency-september-12-13-2014>

### FOR MORE INFORMATION, CONTACT:

Doug Kluck (Doug.Kluck@noaa.gov)  
 Chad McNutt (Chad.McNutt@noaa.gov)  
 Mark Svoboda (msvoboda2@unl.edu)

### What is NIDIS?



Created through bipartisan efforts in Congress in 2006, and reauthorized in 2014, the National Integrated Drought

Information System (NIDIS) is the nexus of drought information, policy, and research. NIDIS promotes collaboration among government agencies, states, communities, tribes, and individuals at all levels to share information about drought, and provide resources for planning, forecasting, managing and recovering from drought. Together with partners, NIDIS pursues the goals of: 1) leadership and networking among all sectors to plan for and cope with the impacts of drought; 2) supporting research on the science of drought, including indicators, risk assessment and resilience; 3) creating location – specific early warning systems for drought management; and 4) developing educational resources, interactive systems, and tools to assist communities in learning about and dealing with drought.